

Alternatively, the scoop may be mounted with the larger cross-sectional area adjacent the sidewall and with the smaller cross-sectional area mounted proximate the center of the container. The cross-sectional area of the channel portion in either case is tapered from end to end. The channel has a leading edge and a trailing edge, one of which extends outwardly more than the other to engage and scoop product from the container into the channel portion during relative movement between the scoop and the container. The scoop is moved or rotated relative to the container with the outwardly extending edge engaging and removing product therefrom. As the exposed layer of food product is scraped up by the scoop, it is guided into the channel and toward an opening in the portion of the scoop having the larger cross-sectional area. The product is dispensed using product forming means to gather the product as it moves through the opening in the scoop and forms it into the desired shape and size for serving.

$$\begin{aligned} \frac{\partial}{\partial t}(\rho u) + \frac{\partial}{\partial x}(\rho u^2) &= -\rho g \\ \frac{\partial}{\partial t}(\rho v) + \frac{\partial}{\partial y}(\rho v^2) &= 0 \\ \frac{\partial}{\partial t}(\rho w) + \frac{\partial}{\partial z}(\rho w^2) &= 0 \\ \frac{\partial}{\partial t}(\rho T) + \frac{\partial}{\partial x}(\rho u T) + \frac{\partial}{\partial y}(\rho v T) + \frac{\partial}{\partial z}(\rho w T) &= k \nabla^2 T \end{aligned}$$